

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1-15. (Cancelled).

16. (Currently Amended) A system for delivering humidified gas to a patient, said system comprising:

a supply unit ~~configured to deliver heated and humidified gas~~including:

a water heater for heating a humidification fluid; and

a humidifier having a breathing gas flow passage and a humidification fluid flow passage, the humidifier configured to heat and humidify a breathing gas in the breathing gas flow passage with the heated humidification fluid;

a delivery tube assembly having a delivery tube with a proximal end and a distal end, said delivery tube assembly also having a fitting positioned at said proximal end of said delivery tube and releasably coupled to said supply unit, said delivery tube assembly ~~being configured to~~configured to pass the heated humidification fluid from the water heater for delivery to the humidification fluid flow passage, to pass the heated and humidified gas received from the breathing gas flow passage, and to transfer heat from the heated humidification fluid to the heated and humidified gas received from said supply unit when coupled to said supply unit; and

a nasal cannula releasably coupled to the distal end of the delivery tube to receive ~~the~~the heated and humidified gas ~~from the delivery tube of~~passed by the delivery tube assembly.

17. (Previously Presented) The system recited in claim 16, said supply unit being configured to deliver humidified gas at a flow rate of about 1 liter per minute to about 8 liters per minute.

18. (Previously Presented) The system recited in claim 16, said supply unit being configured to deliver humidified gas at a flow rate above about 20 liters per minute.

19. (Cancelled).

20. (Previously Presented) The system recited in claim 16, further comprising a releasable coupling configured to couple said nasal cannula to said delivery tube assembly.

21. (Previously Presented) The system recited in claim 20, said releasable coupling comprising an adapter.

22. (Previously Presented) The system recited in claim 16, said fitting of said delivery tube assembly being configured for releasable connection to said supply unit.

23. (Previously Presented) The system recited in claim 16, said supply unit having a gas inlet configured to receive gas.

24. (Previously Presented) The system recited in claim 23, further comprising means for receiving gas from a source of gas and for delivering the gas to said gas inlet of said supply unit.

25. (Previously Presented) The system recited in claim 24, said gas receiving means comprising a tube.

26. (Previously Presented) The system recited in claim 25, said gas receiving means further comprising a fitting configured for connection to the source of gas.

27. (Previously Presented) The system recited in claim 16, said supply unit having a liquid inlet configured to receive supplemental liquid.

28. (Previously Presented) The system recited in claim 27, further comprising a source of supplemental liquid coupled to said liquid inlet.

29. (Previously Presented) The system recited in claim 28, said source of supplemental liquid comprising a water supply bag.

30. (Currently Amended) A method for delivering heated and humidified gas to a neonatal patient, said method comprising the steps of:

connecting a delivery tube to a supply unit configured to deliver humidified gas;

coupling a nasal cannula to the delivery tube;

heating and humidifying a breathing gas in a supply unit, thereby generating the heated and humidified gas; and

delivering the heated and humidified gas from the supply unit to the neonatal patient through the delivery tube and the cannula at a flow rate of about 1 liter per minute to about 8 liters per minute and at a relative humidity in a range a water vapor content of at least about 40 milligrams per liter~~95% to about 100%.~~

31. (Currently Amended) A method for assisting respiration in a neonatal patient comprising:

heating and humidifying a breathing gas in a supply unit; and

delivering the heated and humidified breathing gas from the supply unit to a nasal passageway of the neonatal patient through a delivery tube and a nasal cannula at a flow rate of about 1 liter per minute to about 8 liters per minute and at a relative humidity in a range a water vapor content of at least about 40 milligrams per liter~~95% to about 100%.~~

32. (Currently Amended) A method for delivering heated and humidified gas to a patient, said method comprising the steps of:

releasably connecting a fitting of a proximal end of a delivery tube to a supply unit;

releasably coupling a nasal cannula to a distal end of the delivery tube;

heating a humidification fluid in the supply unit;

heating and humidifying a breathing gas in the supply unit separately from the heating of the humidification fluid, thereby producing a heated and humidified gas in the supply unit; and

delivering the heated and humidified gas and the heated humidification fluid from the supply unit, through the delivery tube such that the heated humidification fluid heats the heated and humidified gas in the delivery tube, and to the nasal cannula for delivery to the patient; and

~~delivering only the heated and humidified gas through the cannula.~~

33. (Currently Amended) A method for delivering heated and humidified gas to a nasal passageway of a neonatal patient using a supply unit to deliver humidified gas, a delivery tube assembly configured to transfer heat to the humidified gas received from the supply unit and having a delivery tube and a fitting connected to the supply unit, and a nasal cannula coupled to the delivery tube assembly, said method comprising the steps of:

heating and humidifying a breathing gas in the supply unit, thereby producing a heated and humidified gas in the supply unit; and

delivering the heated and humidified gas from the supply unit, through the delivery tube assembly and into the nasal cannula at a flow rate of about 1 liter per minute to about 8 liters per minute and at ~~a relative humidity in a range~~ a water vapor content of at least about 40 milligrams per liter ~~95% to about 100%.~~

34. (Currently Amended) A system for delivering heated and humidified gas to a patient, the system comprising:

a supply unit that heats a breathing gas and combines the breathing gas with water vapor to form a heated and humidified gas in the supply unit; and

a delivery tube releasably coupled to the supply unit, the delivery tube being configured to transfer heat to the heated and humidified breathing gas received from the supply unit,

wherein the breathing gas is humidified in the supply unit by fluid that has flowed through ~~and reverses direction in the~~ delivery tube.

35. (Previously Presented) The system according to claim 34, wherein the supply unit provides fluid for humidifying the breathing gas.

36. (Currently Amended) The system according to claim 34, wherein the fluid flow through the system is configured such that the fluid ~~insulates~~ heats the breathing gas prior to humidifying the breathing gas.

37. (Previously Presented) The system according to claim 34, further comprising a nasal cannula coupled to the delivery tube.

38. (Previously Presented) The system according to claim 37, wherein the nasal cannula is releasably coupled to the delivery tube.

39. (Currently Amended) A warming and humidifying system for a breathing gas comprising:

a fluid supply;

a means for ~~insulating~~heating the breathing gas with fluid from the fluid supply; and

a means for humidifying the breathing gas with the fluid after the fluid has ~~insulated~~heated the breathing gas.

40-41. (Canceled).

42. (Currently Amended) A method of delivering a breathing gas to a patient, the method comprising the steps of:

coupling a delivery tube to a supply unit;

coupling a nasal cannula to the delivery tube;

heating a humidification fluid in a heater in the supply unit;

heating and humidifying the breathing gas in a humidifier in the supply unit;

delivering the heated and humidified breathing gas from the supply unit to the delivery tube such that the heated and humidified breathing gas flows in a first direction through the delivery tube;

~~insulating~~heating the heated and humidified breathing gas with ~~a~~the humidification fluid in the delivery tube such that the humidification fluid flows ~~in at least the first direction from the heater, through the delivery tube, through the humidifier, and to the heater as such that~~ the fluid heats the heated and humidified breathing gas in the delivery tube and in the humidifier; and

delivering the heated and humidified breathing gas from the delivery tube to the nasal cannula for delivery to the patient.

43. (Previously Presented) The method according to claim 42, further comprising the step of humidifying the breathing gas with the fluid.

44. (Previously Presented) The method according to claim 43, wherein humidifying the gas with the fluid is performed after the fluid insulates the breathing gas.

45. (Previously Presented) The method according to claim 42, further comprising flowing the fluid in a second direction, opposite the first direction, through the delivery tube.